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Docket No.: 022116.0102PTUS

Application No. 10/823,294  
Amendment dated February 9, 2007  
Reply to Office Action of January 9, 2007

**REMARKS**

Claims 1 - 114 are pending in this application.

In an Office Action mailed January 9, 2007, the Examiner has made a restriction requirement to either the claims of Group I, i.e., claims 1 - 79, 84 - 86, and 95 - 99, which are drawn to methods for the detection of a microorganism in a sample comprising the use of a bacteriophage; the claims of Group II, i.e., claims 80 - 83, which are drawn to methods for determining the resistance/susceptibility of a microorganism to antibiotics; the claims of Group III, i.e., claims 87 - 91, which are drawn to methods for manufacturing a lateral flow test substrate; the claims of Group IV, i.e., claims 92 - 94, which are drawn to methods for manufacturing a SILAS test substrate; the claims of Group V, i.e., claims 100 - 107, which are drawn to an apparatus for detecting a microorganism; or the claims of Group VI, i.e., claims 108 - 114, which are drawn to kits for the detection of a microorganism.

The Applicants elect the claims of Group I, i.e., claims 1 - 79, 84 - 86, and 95 - 99; therefore claims 80-83, 87-94, and 100-114 have been canceled.

Applicants do not fully understand the species election requirements relating to group 1, since some of the required elections appear so broad. For example, all claims in the application involve using the presence (or non-presence) of the phage or phage substance to identify microorganisms, including the methods that use a reference. As another example, lateral flow devices generally utilize antibody attachment. Applicant has nonetheless tried to comply with all species restrictions insofar as possible, below. A telephone conversation is respectfully requested to clarify the election requirement if in some way the requirements are not believed to be met.

The Examiner has made a further restriction requirement to a Species within the claims of Group I, i.e., one method of assaying from (a) the use of a lateral flow device (claim 4), (b) complexing with color beads (claim 5), (c) antibody attachment (claim 6), (d) SILAS (claims 8 and 9), (e) mass spectrometry (claims 10 - 12), and (f) the use of a laser beam (claim 13), and if Species (e) is elected there must be an election of either MALDI, the use of magnetic beads, or both. Applicants elect the

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species (c), i.e., antibody attachment. Claim 6. Claim 6 is generic with respect to this species and it is believed all claims are in this subgrouping to the extent that antibody attachment can be used in combination with all the claims.

The Examiner has also made a further restriction requirement to one of the modes of detection from (A) using the presence of the phage or phage substance to determine the presence of the bacteria, (B) using a comparison of the presence of the phage or phage substance with a control (claim 49), or (C) detecting a color change to determine the presence of a bacteria (claims 84 – 86). Applicant elect the species (A), i.e., using the presence of the phage or phage substance to determine the presence of the bacteria. Since all claims use the presence (or absence) of phage or phage substance to determine the presence of a microbe, this species is believed to include all claims.

The Examiner has also made a further restriction requirement to one of the methods of lysing the bacteria from those identified in claims 3, 15, and 16, or one of the modes identified in claim 17. Applicant elect the species of claim 3, i.e., providing conditions sufficient to cause said bacteriophage to multiply sufficiently to burst said target bacterium. Only claims 16 and 17 are not part of this group.

The Examiner has also made a further restriction requirement to one of the methods of dissociating the phage from those identified in (e.g.) claim 20. Applicant elects the species of using a denaturing agent to dissociate the bacteria. All claims except the non-elected portions of claim 20 can be combined with this species.

The Examiner has also made a further restriction requirement to one of the methods of tagging the parent phage selected from biotinylation, or attachment to a substrate. Applicant elects the species of biotinylation. Biotinylation can be used in combination with all the claims. For example, biotinylation can be used to attach a phage to a substrate.

The Examiner has also made a further restriction requirement to or one of the modes of genetically engineering the bacteriophage selected from those identified in claims 33 – 36. Applicant

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elects the species of claim 35, i.e., the species wherein the bacteriophage is genetically modified to express an enzyme. All but claims 33, 34 and 36 are believed to be part of this group.

In view of the above amendments and remarks, Applicants believe the pending application is in condition for allowance. Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-1848, under Order No. 022116.0102PTUS from which the undersigned is authorized to draw.

Respectfully submitted,  
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Dated: 2/9/07By: 

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